



Data Privacy- AES Using Secure Hashing

Meghana Ajith Prasad, Namrata Jagannath, Sumantha Doddabyadarahhali-Shivalingu

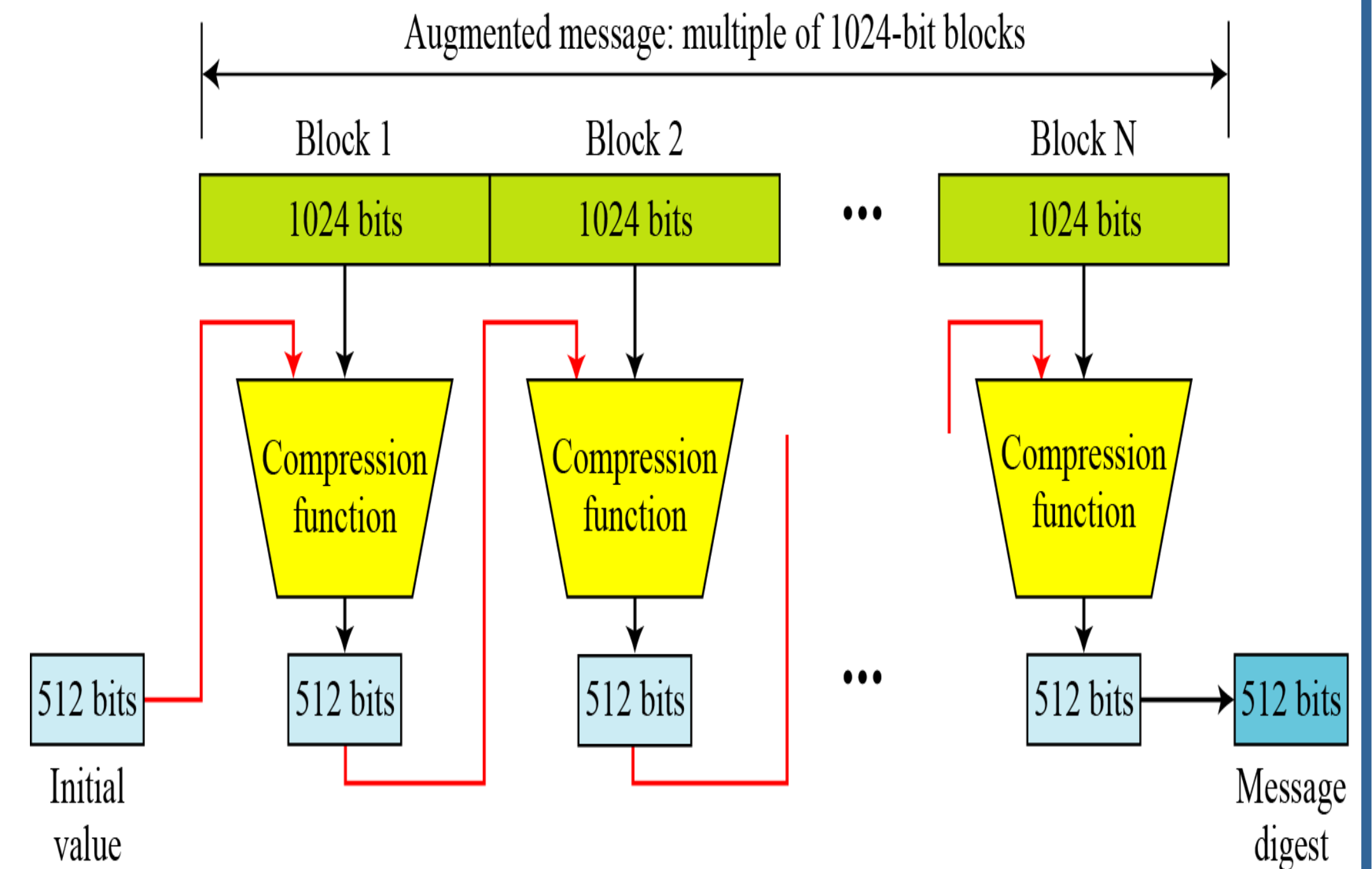
Advisor: Abdel-shakour A. Abuzneid, Ph.D., IEEE WCP

Department of Computer Science

University of Bridgeport, Bridgeport, CT

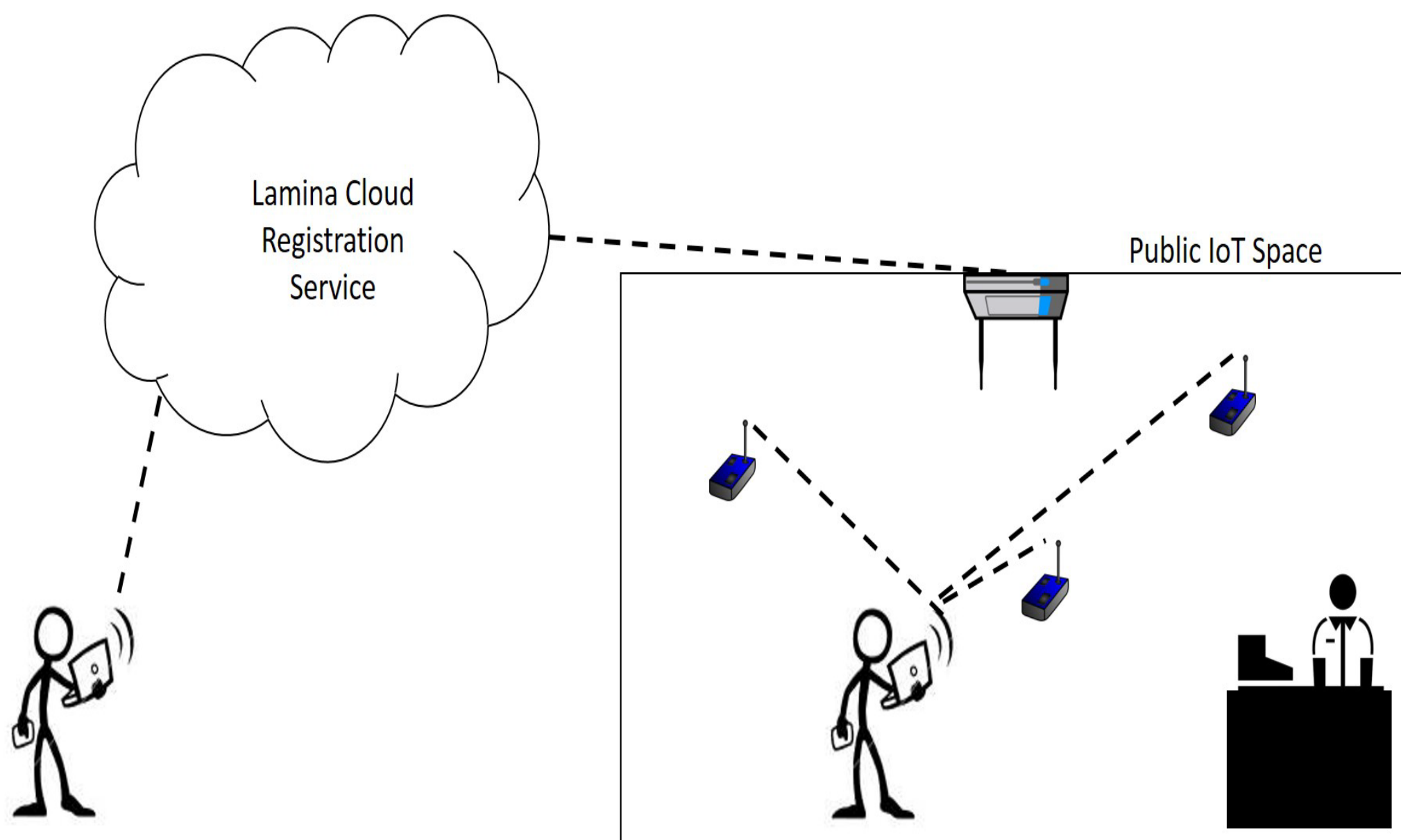
Abstract

Securing personal data in the public spaces is something to worry about, in particular, the privacy and the confidentiality. The Internet of Things (IoT) will be widespread all over the network to connect devices and the people through the Internet. However, maintaining privacy in public places has become a difficult task in the day-to-day life. This work is mainly concerned about the privacy and the confidentiality of the personal data in the public places.

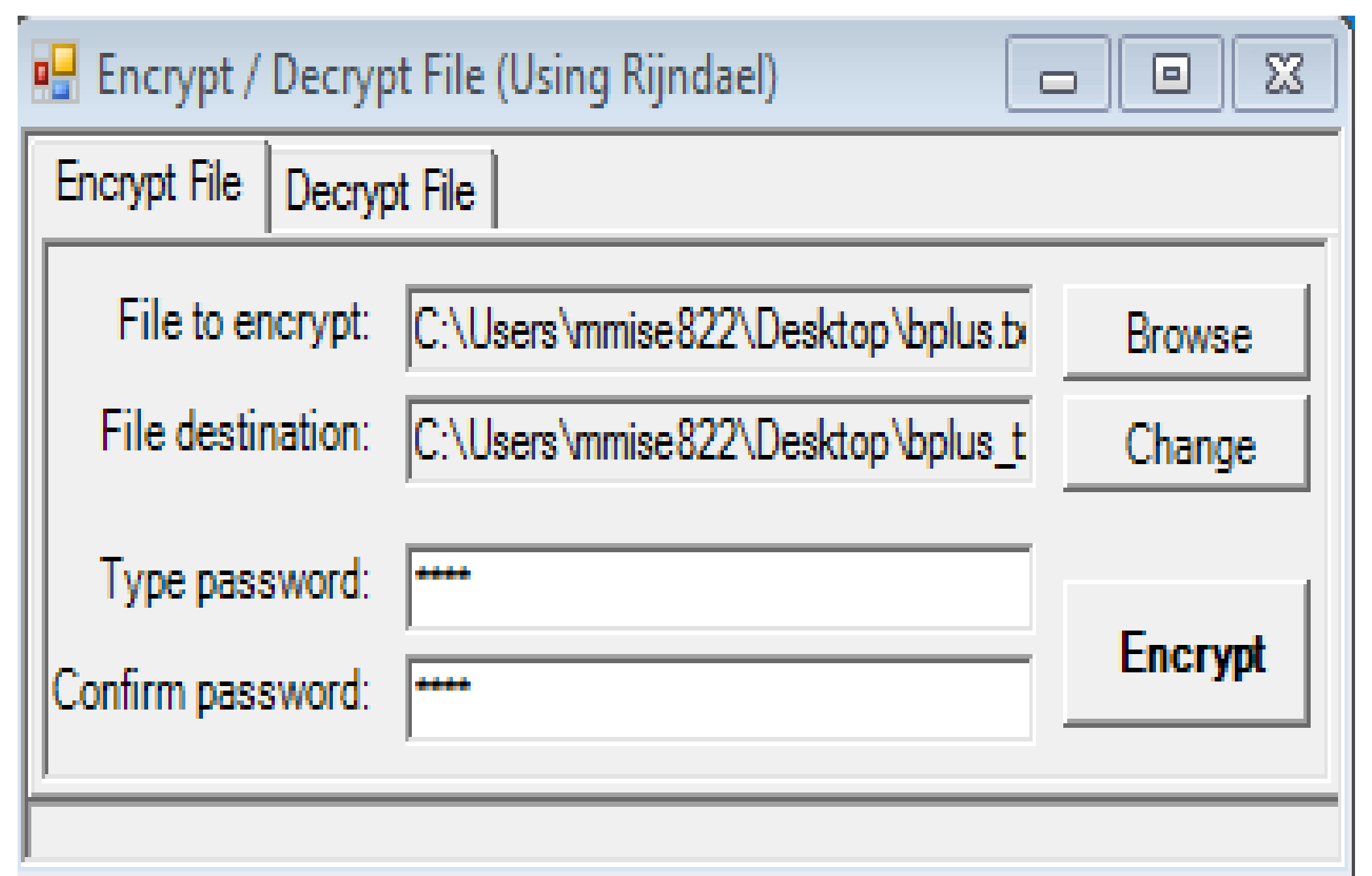


Introduction

The aspect of security is a big issue in the field of Internet of Things (IoT). So we came with the idea of using *Lamina Architecture* in this work. Here we have implemented Advanced Encryption Standard (AES) using Secure Hashing technique. The framework is used by security arrangements consulted between smart device users and IOT public space:



Results and Evaluation



During the encryption and decryption process will come up with this process, where the password should be entered, at first. The processing time will be displayed and even the actual path where the file is located. All these will be working with the help of Initial vector(IV) in Secure Hash Algorithm (SHA-512).

Problem definition

The Internet is everything; it has become one of the core things for the living and with which we are concerned about to secure data in all our connected devices to the network. Moreover, we expect all these processes to be done in an unmanned environment and in a mannered way. Through a lot of progress on IoT, along with that encryption and decryption process also got evolved, in which CryptoCoP-based encryption is implemented on both the smart devices and the IOT public spaces.

Conclusion

The work ensures that third parties cannot obtain private information of the user sharing information via IoT space. We used CryptoCoP-based encryption, and MAC address cycling on the data which is shared between the user device and IoT space and using Lamina; a mobile system which helps in enabling privacy and security. Moreover, in future works, there will be a flow of controlling data feature will be added to lamina's incognito environment for the current situation.